

Abstract of the Disclosure

A multi-wavelength surface emitting laser for emitting light having different wavelengths includes a lower reflector, an active layer and an upper reflector which are integrally formed above one substrate. The multi-wavelength surface emitting laser is manufactured by forming a first surface emitting laser, partially removing a first upper reflector, a first active layer, and a first lower reflection layer by etching. A protection film is formed on the outer surface of the first surface emitting laser. A second surface emitting laser is formed by removing a second lower reflector, a second active layer, and a second upper reflection layer formed on the protection film by etching. The protection film is removed and first and second upper electrodes are formed on upper surfaces of the first and second upper reflection layers, respectively, and a lower electrode is formed on a bottom surface of the substrate.

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